



VISION ZERO IN DC, MD, VA

Age-Friendly Ecosystem Summit || November 9, 2022

PANELISTS



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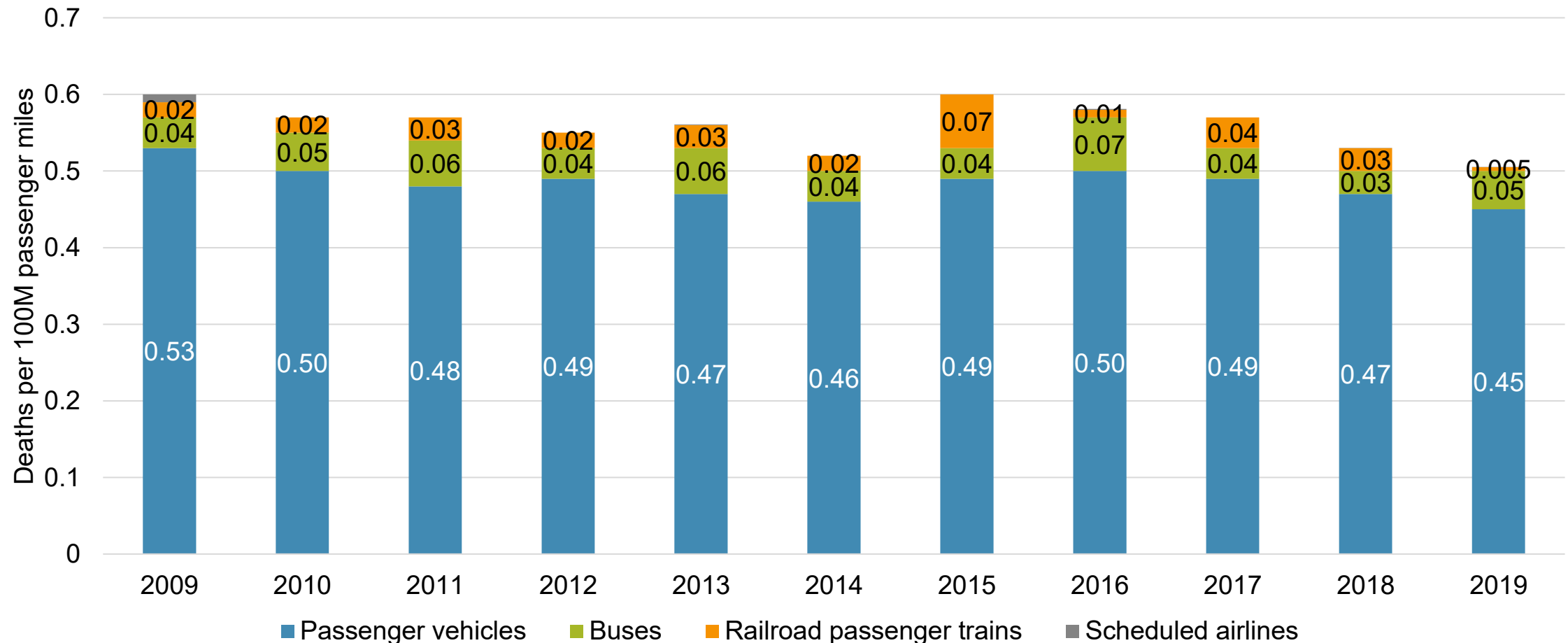
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THE PROBLEM

Deaths in US by Transportation Mode

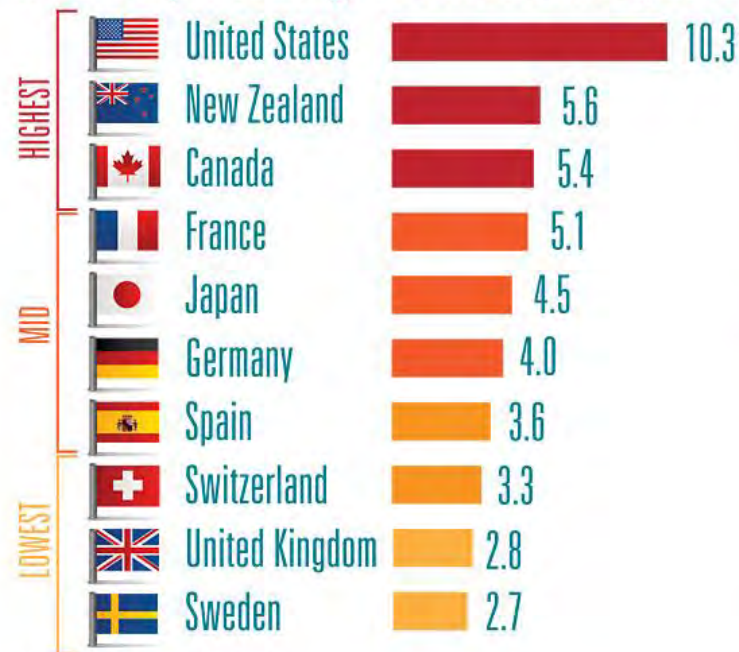
Passenger vehicle death rate per 100,000,000 passenger miles was over 9 times higher than for buses, 17 times higher than for passenger trains, and 1,606 times higher than for scheduled airline.



SOURCE: [Deaths by Transportation Mode - Injury Facts \(nsc.org\)](https://www.nsc.org/injury-facts/deaths-by-transportation-mode)

Road traffic deaths in the US and other high-income countries.

Motor vehicle crash deaths in 10 comparison high-income countries, 2013



Deaths per 100,000 people
SOURCE: WHO Global Status Report on Road Safety, 2015.

Countries with the highest and lowest reductions in crash deaths, 2000-2013

Spain (highest)

↘ 75%



AVERAGE

of 19 high-income countries ↘ 56%



United States (lowest)

↘ 31%



Deaths per 100,000 people

SOURCE: International Road Traffic and Accident Database (IRTAD) Road Safety Annual Report, 2015.

Pedestrians and Speed

A small change in speed makes a big difference in survivability

Hit by a vehicle
traveling at

23

MPH

10% risk of death



Hit by a vehicle
traveling at

42

MPH

50% risk of death



Hit by a vehicle
traveling at

58

MPH

90% risk of death



Image Source: [FHWA](#)

Humans are Vulnerable

Managing speed = less energy transferred = lower severe injury risk

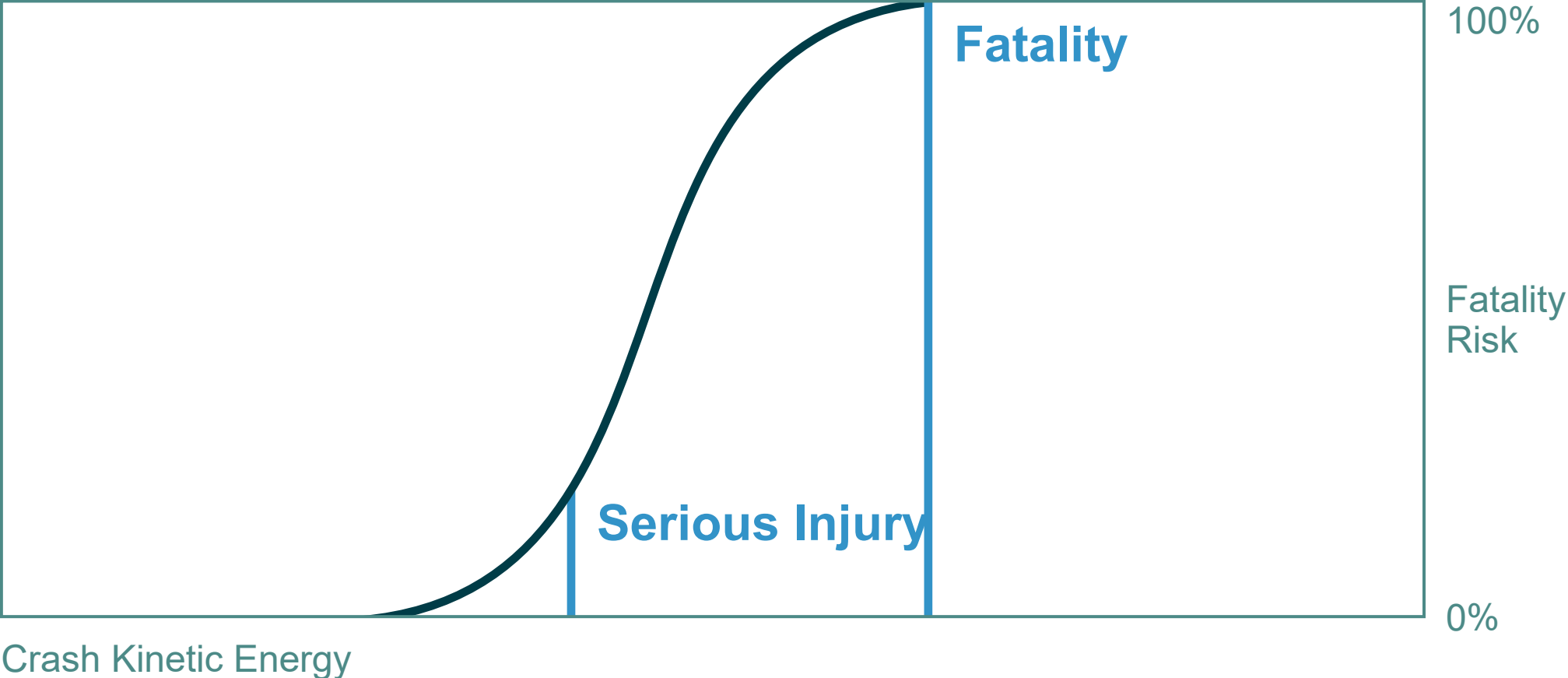


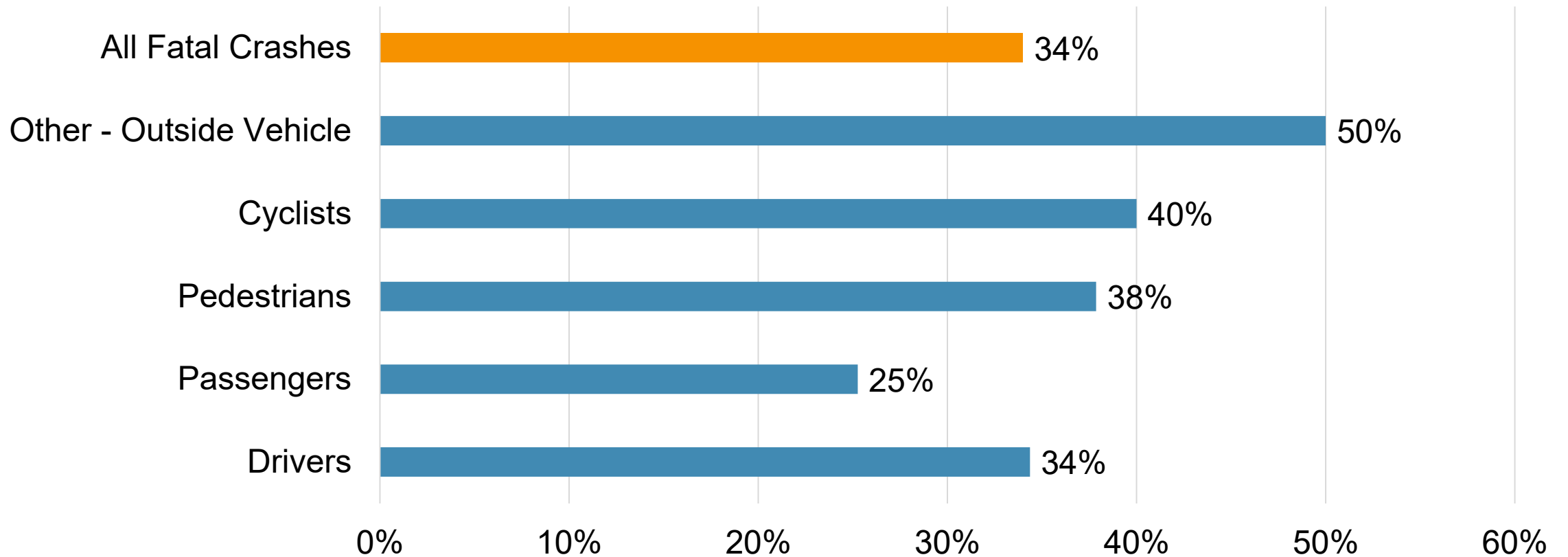
Image Source: [FHWA](#)

Older Adults and Fatal Crashes

34% of DC, MD, and VA crash fatalities from 2016-2020 were people age 55+

28% of the DC, MD, and VA population was age 55+

% of People Fatally Struck in DC, MD, and VA Aged 55+



Safe System = Safe Mobility



System Planners & Policy Makers

Responsible for prioritizing safety in designs, policies



If road users make mistakes

Designs & policies analyzed for safety improvements



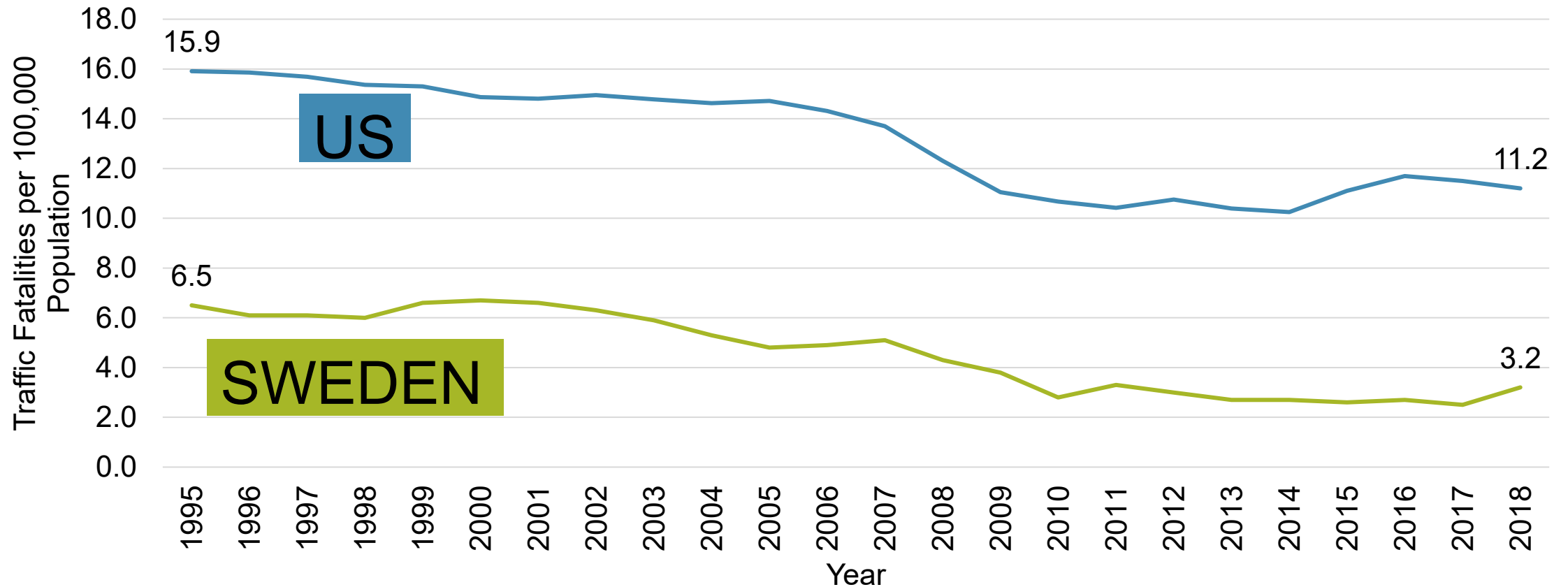
Individual Road Users

Responsible for following rules

THE SOLUTION: VISION ZERO

Swedish Model of Traffic Safety

Vision Zero, adopted in Sweden's Parliament in 1997, has spread worldwide due to strong results in saving lives and making Swedish roads some of the safest to travel in the world.



What is Vision Zero?

Building Layers of Safety to Prevent Serious and Fatal Injuries on Our Roadways



Layers of Systematic Safety

The 5 Safe System Elements Create Redundancy

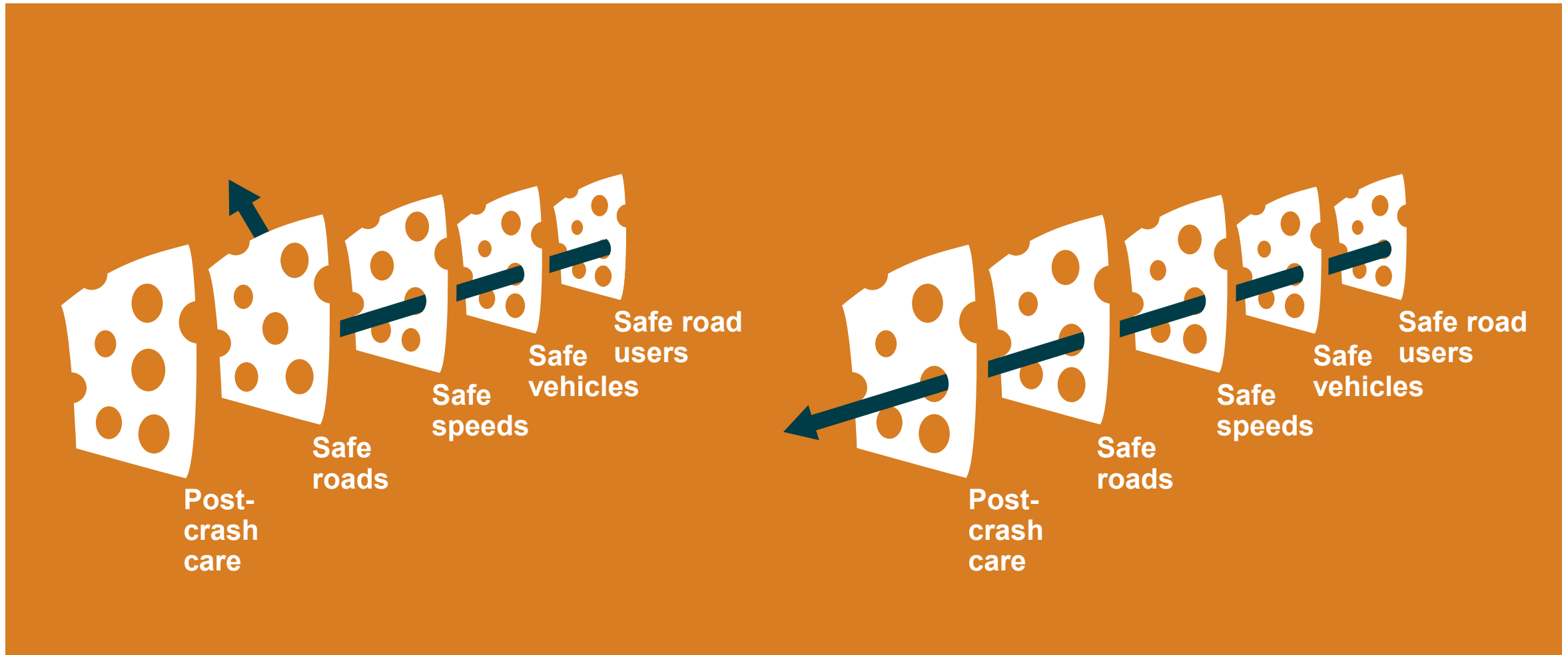
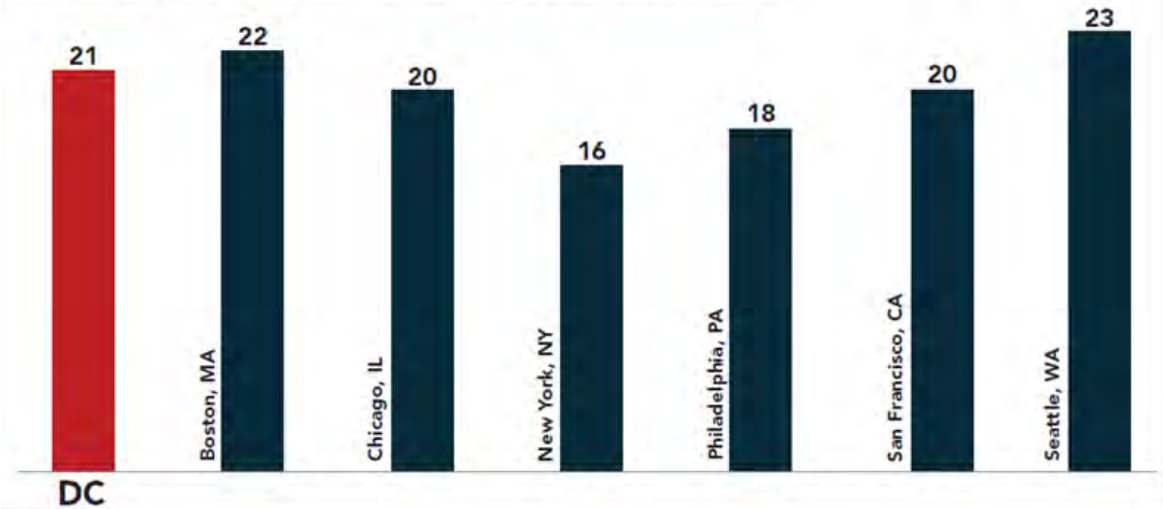


Image Source: [FHWA](#)

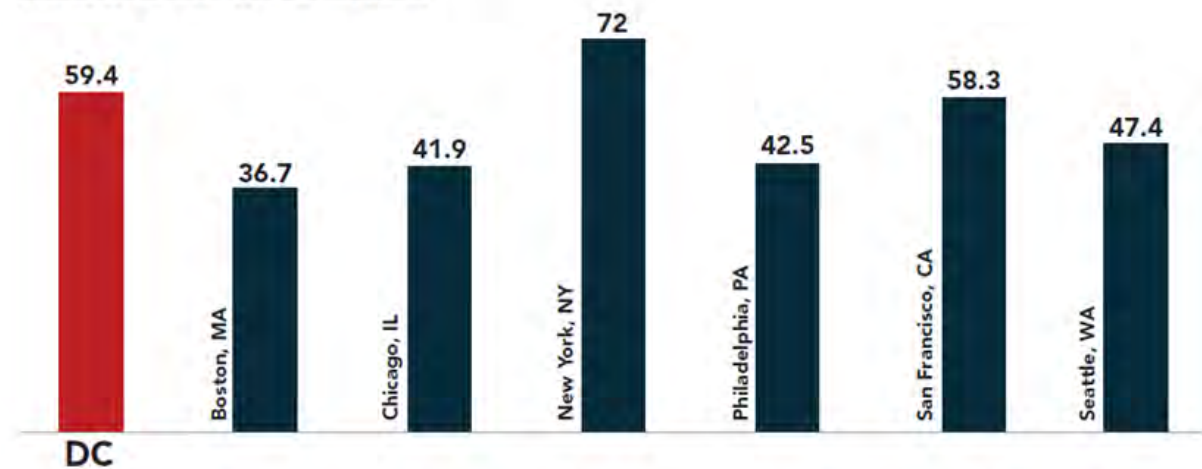
Underlying factors

- Transportation Systems and Policies (Vehicle Miles Traveled (VMT) per capita, commute mode share, street network density, street types and design)
- Land Use and Zoning (Parcel and block size, building setbacks, land uses, development patterns, etc.)
- Demographic Data (Income levels and Poverty, race and ethnicity, Unhoused populations)

Vehicle Miles Traveled per 100,000 Residents



% Non-SOV Mode Share



Unique regional factors

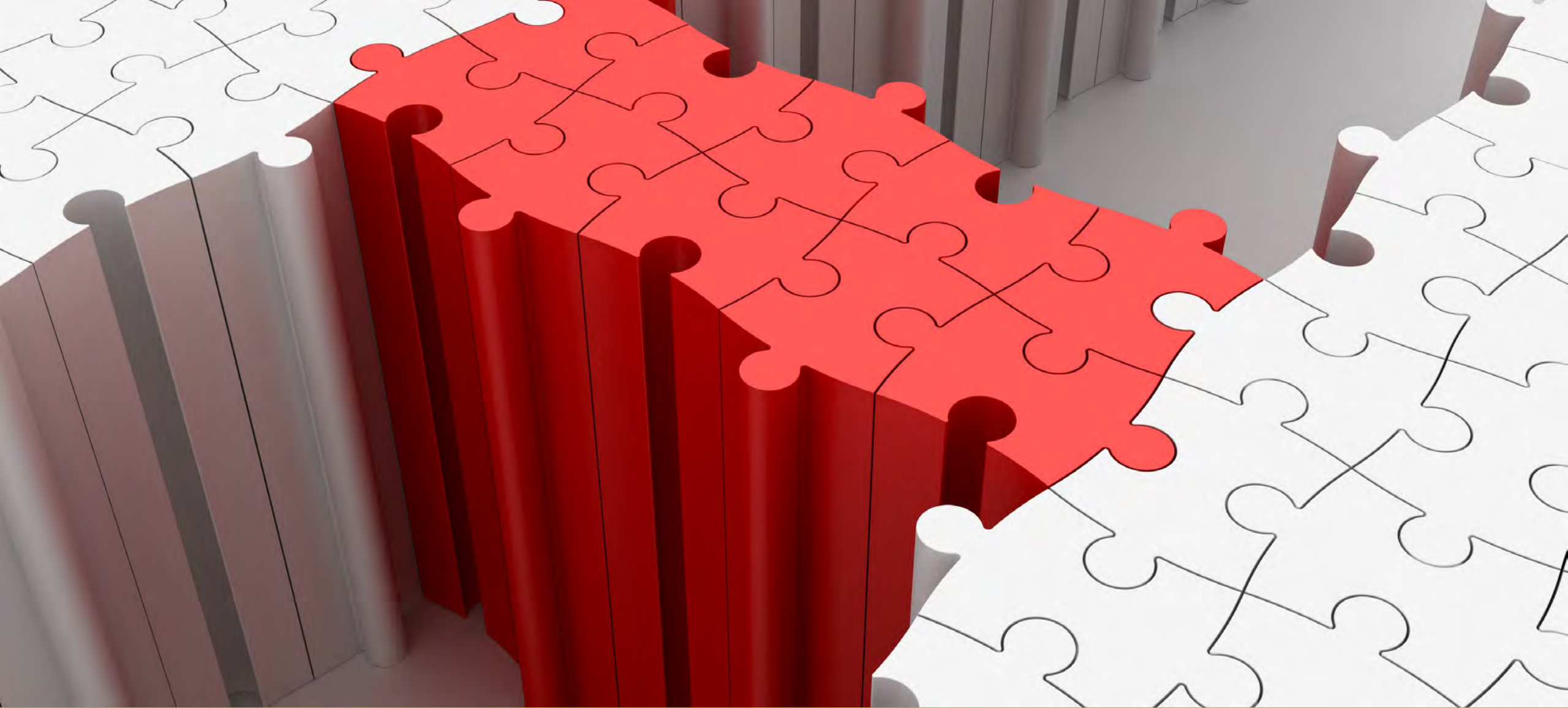
Seat of National Government

National and Regional Cultural Center

National and Regional Employment

Regional Connectivity





VISION ZERO IMPLEMENTATION



VISION ZERO IN DC

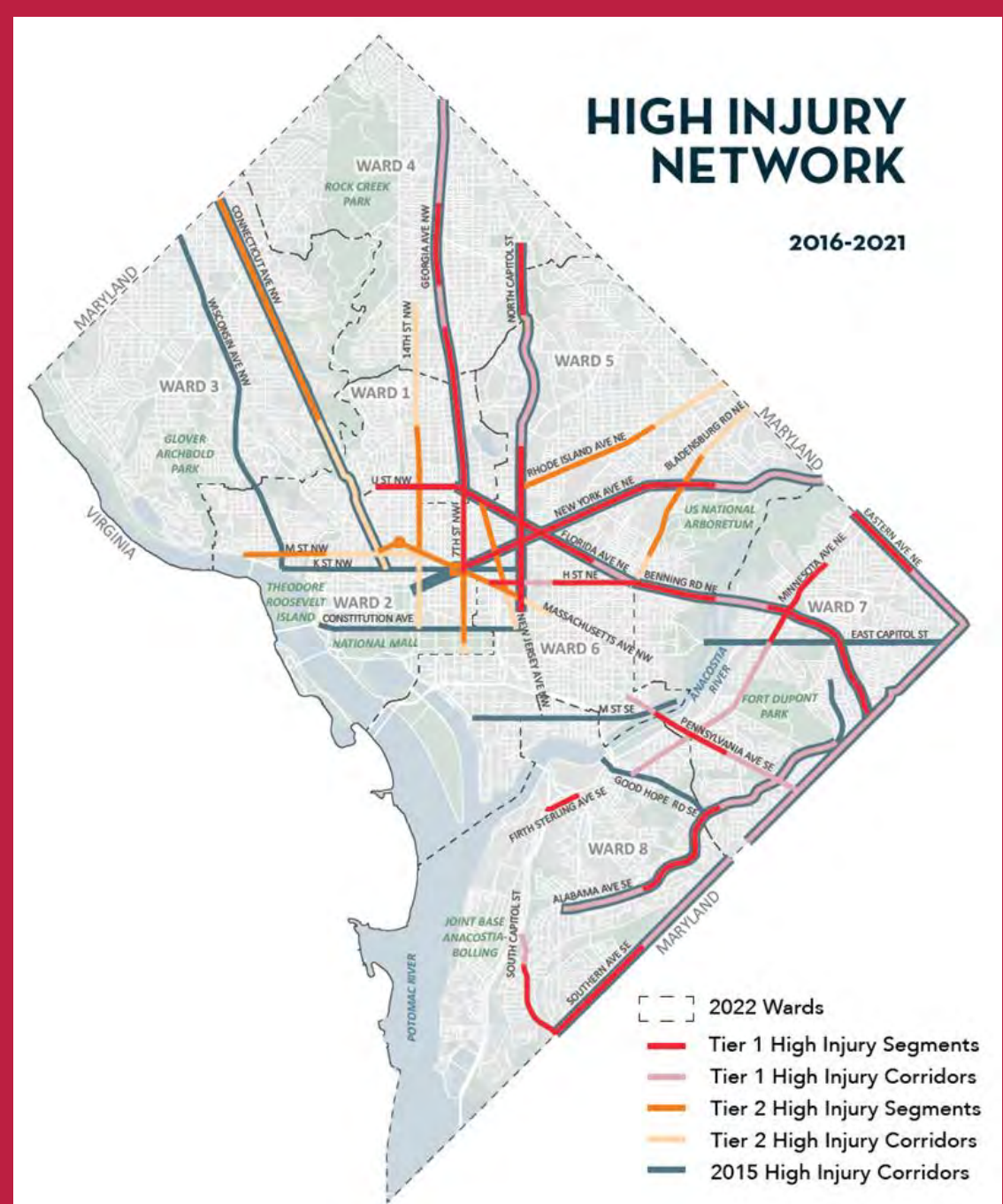
What does Vision Zero mean in DC?

Using a layered, **all-hands-on-deck, multi-agency** response: Safe Streets, Safe Speeds, Safe People, Safe Vehicles, and Post-Crash Care

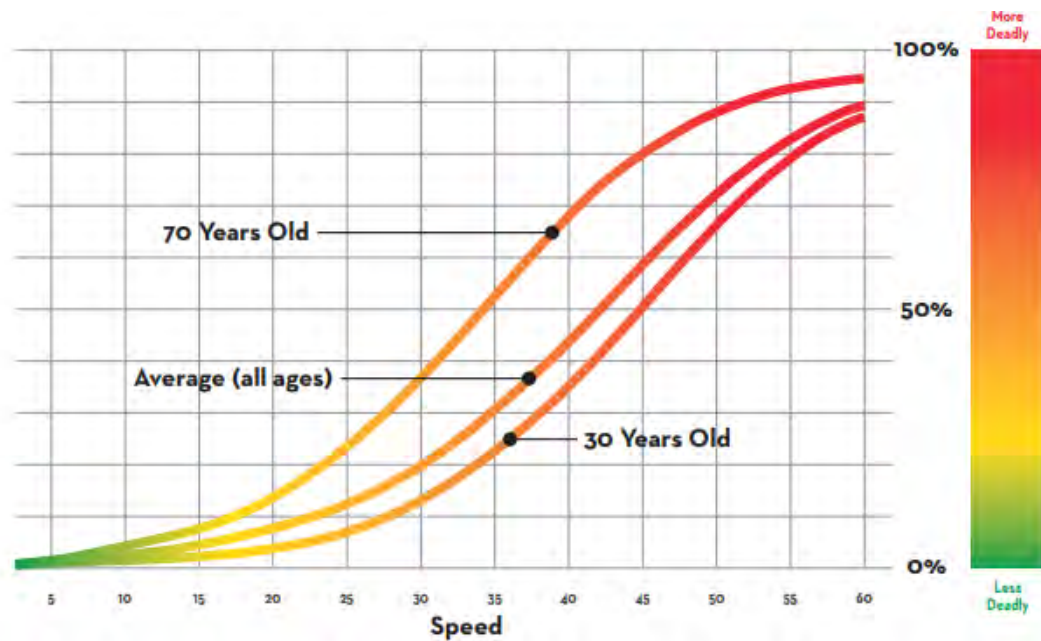
Making **difficult decisions on trade-offs** that prioritize human life and health

Being **Data-driven** to target highest risk of injury/fatality -->

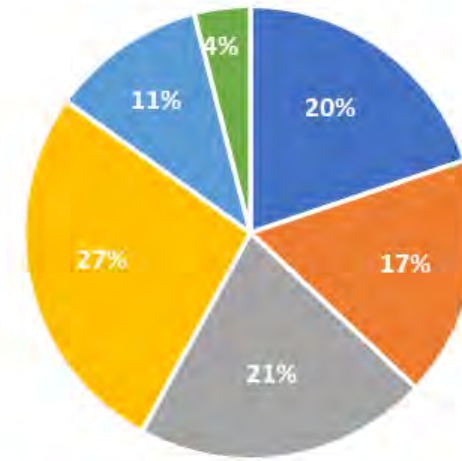
Going **above and beyond the minimum design standards** that are traditionally set for the United States.



Crashes, and fatalities & injuries by age group, DC, 2017-22 -->

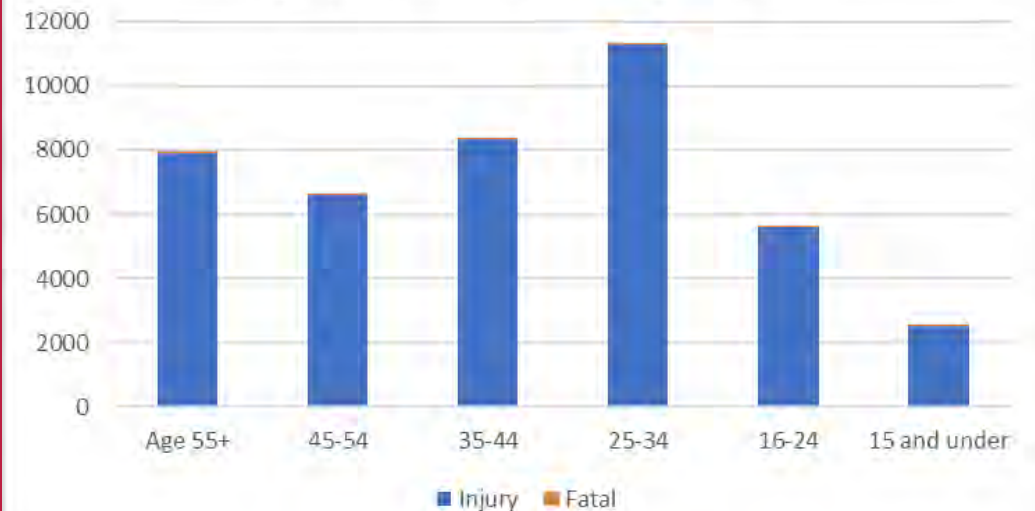


Total by Crashes by Age Group



■ Age 55+ ■ 45-54 ■ 35-44 ■ 25-34 ■ 16-24 ■ 15 and under

Injury and Fatalities by Age Group



Safe Streets

Street design influences behavior and deters dangerous driving behaviors.

Example:

- **DC's Bus Priority Plan** is the District's plan to implement transit priority treatments on key streets for improved bus service – and other pedestrian and multi-modal safety improvements on these corridors at the same time.
- Action Commitments: 51 projects over the next 10 years!



Safe Speeds

Speed is a critical factor for the safety and crash risk of a street.

Example:

Automated Traffic Enforcement (ATE) includes speed, red light, stop sign (and - soon - bus lanes). ATE reduces speeding with its mere presence and 70% of ticketed drivers receive just one citation. (Note: ATE is just one part of Safe Speeds)

Action Commitments:

- Increase the number and types of ATE cameras; enhance safety assessment of new ATE cameras



Safe People

The focus for safer people is **education and outreach, enforcement, and legislative rules** to ensure all street users are traveling safely.

- **Education efforts should center youth and seniors** as they are overrepresented in injury and fatal crash data.
- Expectations and responsibility must be appropriately set: **the heavier and more powerful the vehicle, the greater the driver or user's capacity for harm.**



Safe Vehicles

Vehicle standards that cities can best control are fleets, registration, regulation and enforcement of certain aspects of private vehicles, and to **work with federal partners** to support safer vehicle designs and industry standards.

Post-Crash Care

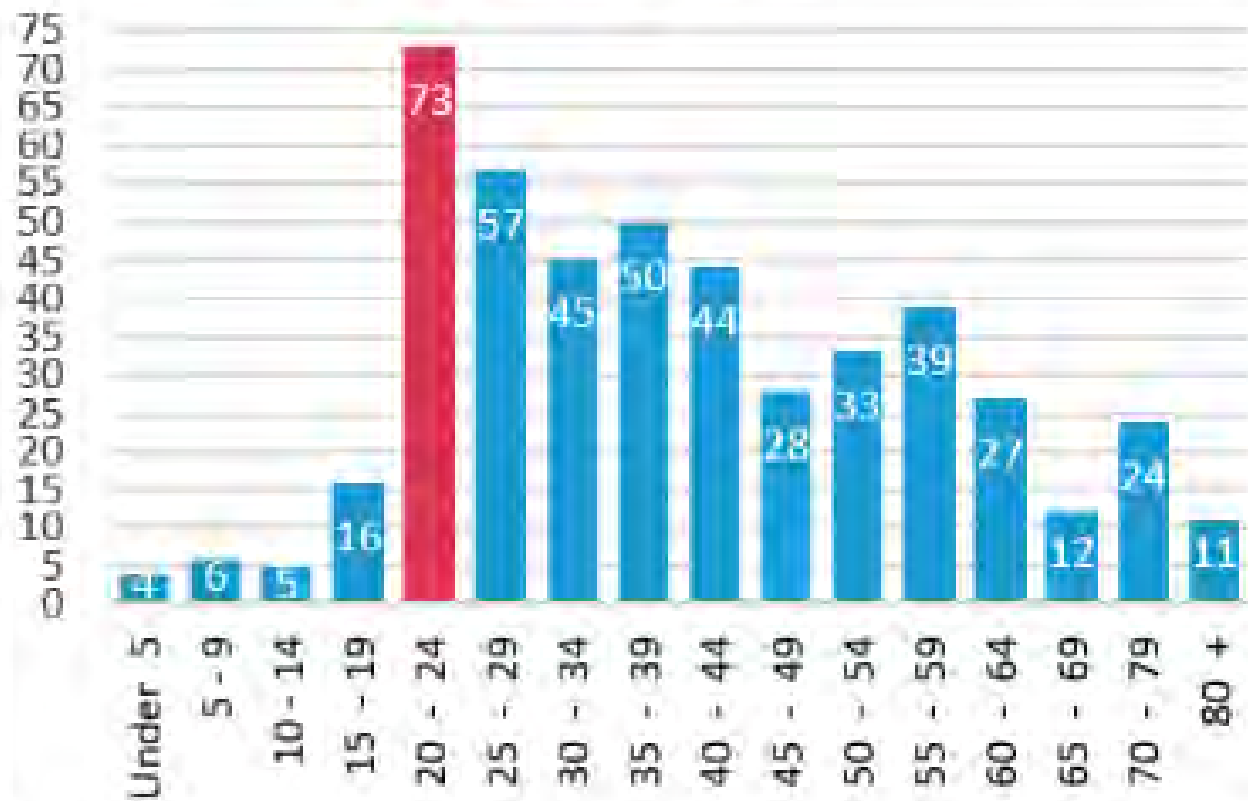
The goal of Post-Crash Care is to **enhance the survivability** for those involved, while **creating a safe work environment** for those first responders, and **collecting accurate and descriptive crash data**.





VISION ZERO IN PRINCE GEORGE'S

Traffic Deaths by Age Group 2016 - 2020



Crashes
Involving
Older Adults

Young Persons

VISIONZERO
 prince georges
SAFE STREETS FOR EVERYONE.

Achievements
 Completed July 2021 to June 2022

123 Neighborhood Traffic Management Program Studies Completed

1,835 Street Lighting Improvements

46 New Speed Humps

5 Major Road Safety Projects Completed

860,000 Square Feet of New and Replaced Sidewalk

18 Miles of Road Resurfaced

- Ager Road Green Complete Street | Hyattsville
- Montpelier Drive | Laurel
- Marlboro Pike | District Heights
- Langley Park Area CASA Crime Prevention Coalition Project | Langley Park
- Sunnyside Avenue Bridge | Beltsville

50 Community Events
 Traffic Safety Outreach and Promotion

15,000 Safety Pledge Cards Distributed
 Help Spread a Culture of Safety

2,250 Safety Pledges Recorded

www.VisionZeroPrinceGeorges.com

Prince Georges Proud

DPWT




County Roadway High Injury Network







Vision Zero High Injury Network

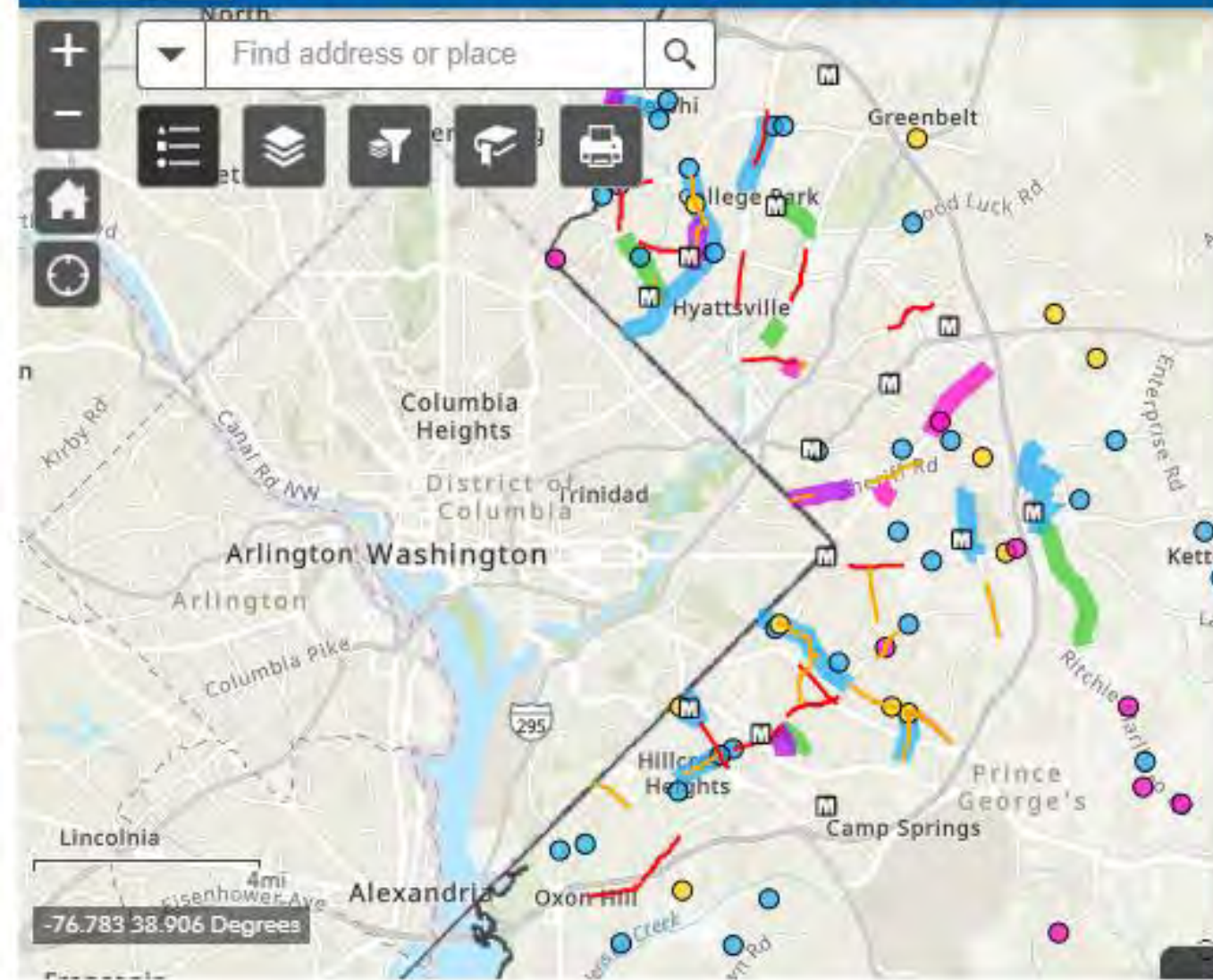


Vision Zero Localized Improvement Projects

-  Bike or Pedestrian Improvement
-  Roadway Safety Improvement
-  Signals, Signage and Lighting

Vision Zero Corridor Improvement Projects

-  Bike or Pedestrian Improvement
-  Green/Complete Street
-  Road Safety Audit
-  Roadway Safety Improvement





Ager Road, Hyattsville - Green and Complete Streets

The County improved the appearance, safety and functionality by incorporating new features including six-foot wide, green bike lanes, continuous six-foot sidewalks, and enhanced pedestrian safety features: Countdown pedestrian signals, rectangular rapid flashing beacons, sidewalk buffers, and ADA accessible sidewalk features. The project also enhances connections to the Northwest Branch Trail.

[Learn More](#)

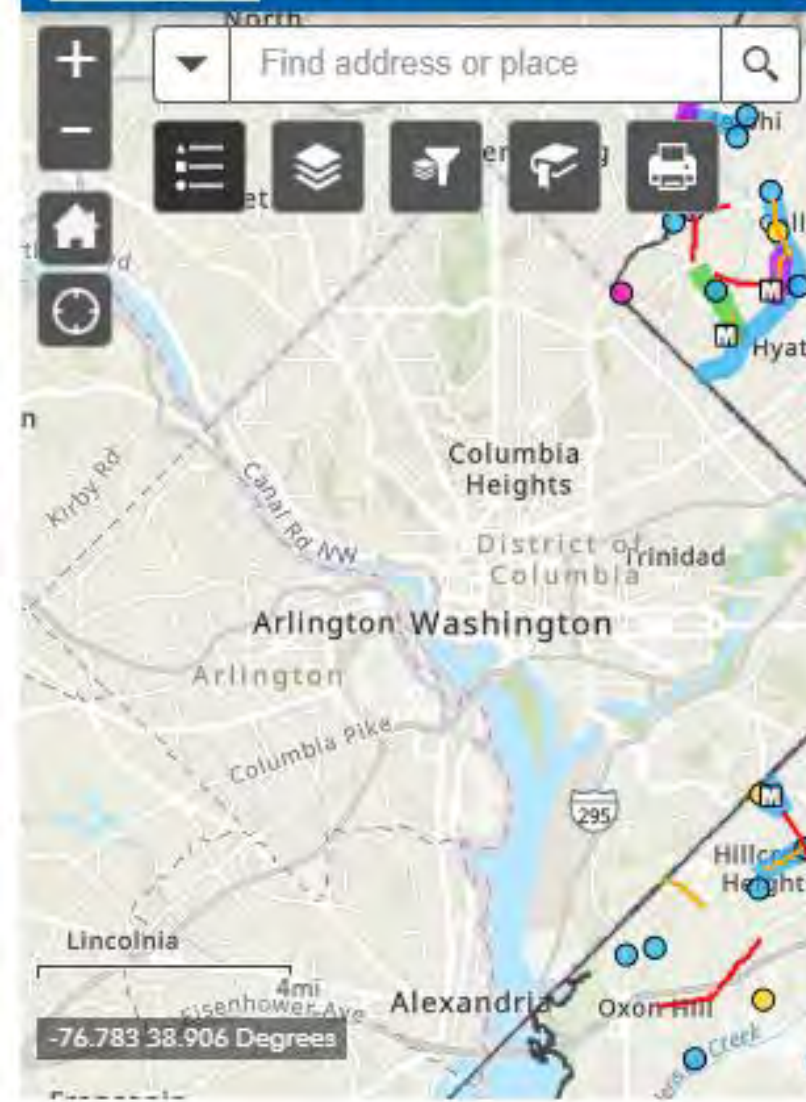


Montpelier Drive, Laurel - Green Street Improvements

The County improved the appearance, safety and functionality of Montpelier Drive to address speeding through the installation of concrete islands and curb returns, coupled with a significant road diet for traffic calming. We also replaced deteriorated curb, sidewalk, ramps, and driveway aprons. New safety features include raised grass medians, curb extensions at intersections, choker islands, new bike lanes and LED street lights.

[Learn More](#)





Langley Park Area Safety Improvements

The Langley Park Area CASA Crime Prevention Coalition Project included beautification, walkability improvements, and pedestrian safety improvements along 14th Ave, 15th Ave, and Kanawha St. Specific actions included: new sidewalks with wide walkways, lighting improvements, mid-block crossings, new crosswalks, and landscaping improvements.

[Learn More](#)



Tucker Road, Fort Washington - Bike and Pedestrian Improvements

The County constructed sidewalks, curbs, and gutters to address periodic flooding. Now, pedestrians and bikers can safely access civic and recreational facilities, such as the Tucker Road Community Center and Ice Rink Sport Complex.

[Learn More](#)



Families enjoyed the Vision Zero traffic garden at the 2022 Green Summit hosted by the Prince George's County Department of the Environment. Children practiced navigating streets and intersections in a safe space. #princegeorgesproud #visionzeroprincegeorges



Multigenerational Approach



Senior Fitness Day and Picnic at Watkins Park

Park & Rec Senior Walk and Cycling Clubs



Senior Fitness Day and Picnic at

Park & Rec Senior Walk and Cycling Clubs



Returning to the Mall at Prince George's
 November 20, 2022 –
 English and Spanish Panels



Prince George's County Department of Family Services
Aging and Disability Resource Center



6420 Allentown Road | Camp Springs, MD 20748



301-265-8450 | Maryland Relay 711 | FamilyServices.mypgc.us



The Prince George's County Aging and Disability Resource Center (ADRC) assists older adults, individuals with disabilities and family members with navigating long-term care services and support systems.

The ADRC also provides information, assistance, referrals, and options counseling to empower people to make informed decisions about accessing public and private programs that enhance their quality of life.



2022 Resource Guide (PDF)

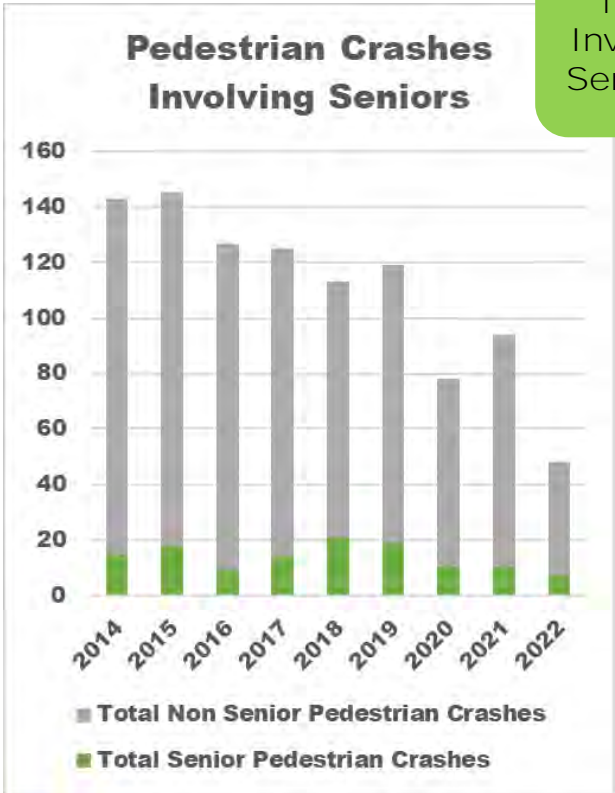
- Call-A-Bus is curb to curb service. Call 301-499-8603.
- Call-A-Cab provides reduced cost mobility for seniors and disabled people. Call 301-883-5656.



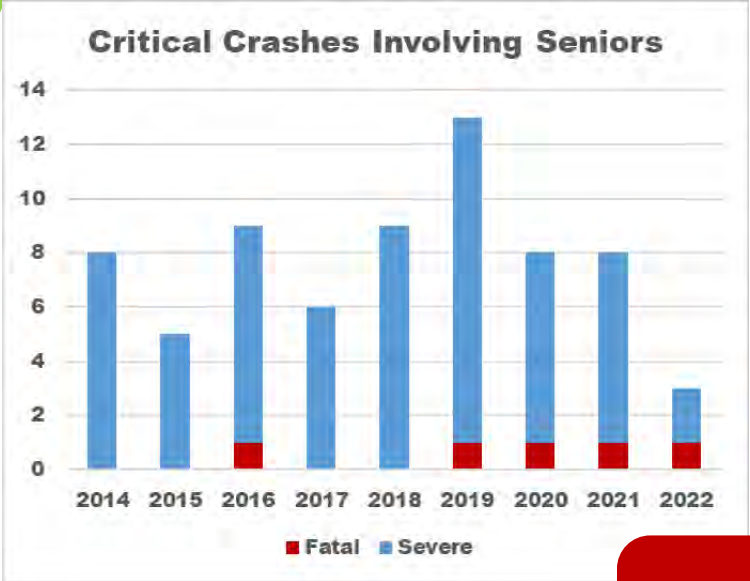
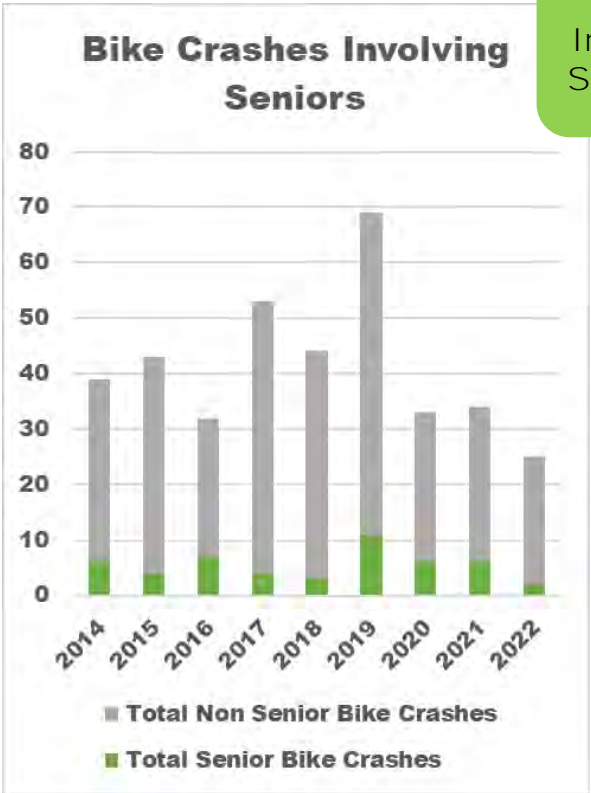
VISION ZERO IN ARLINGTON

Note: 2022 Data Available Jan-Aug

12%
Involve
Seniors



13%
Involve
Seniors



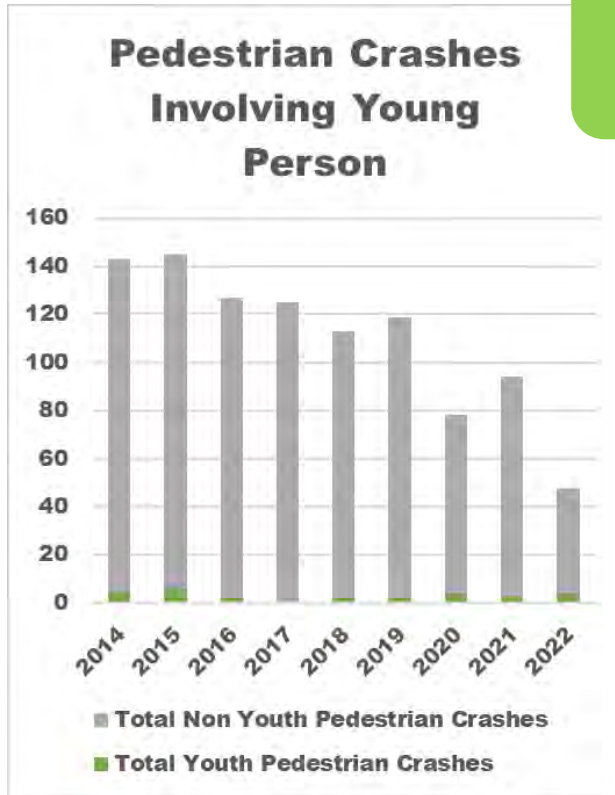
13%
Involve
Seniors

Crashes Involving Older Adults

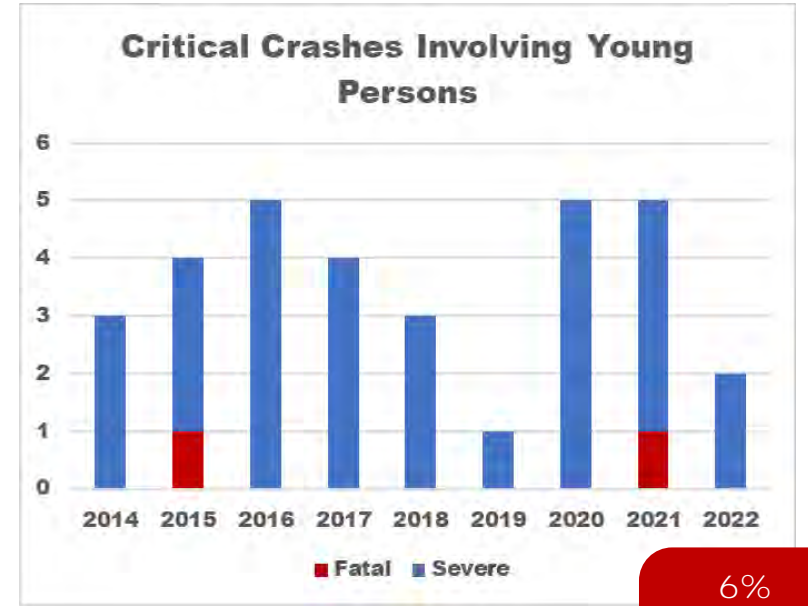
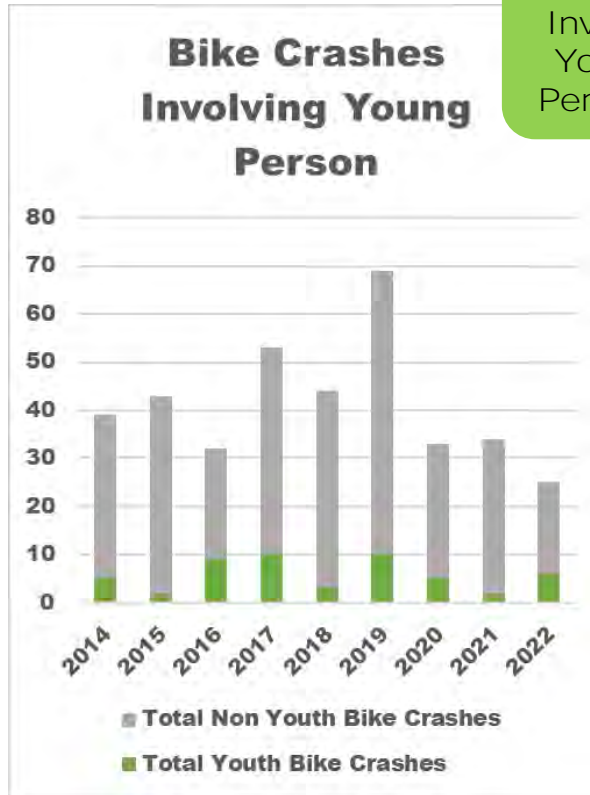
Older adults (65 years and older) are involved in 12% of all crashes in the County & account for 12% of the population.

Note: 2022 Data Available Jan-Aug

3%
Involve
Young
Persons



14%
Involve
Young
Persons



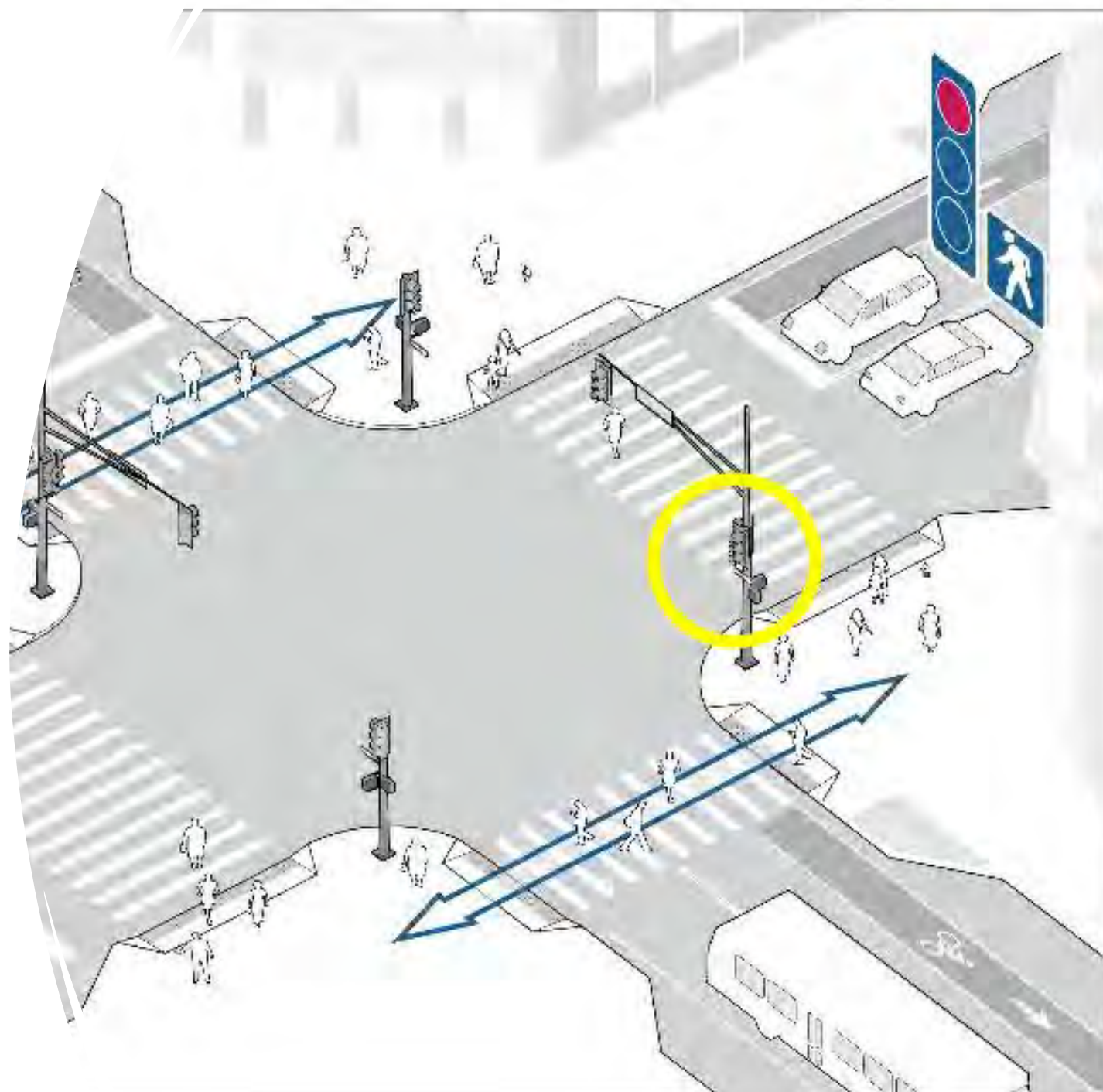
6%
Involve
Young
Persons

Crashes Involving Young Persons

Young persons (under 21 years of age) are involved in 8% of all crashes in the County & account for 25% of the population.

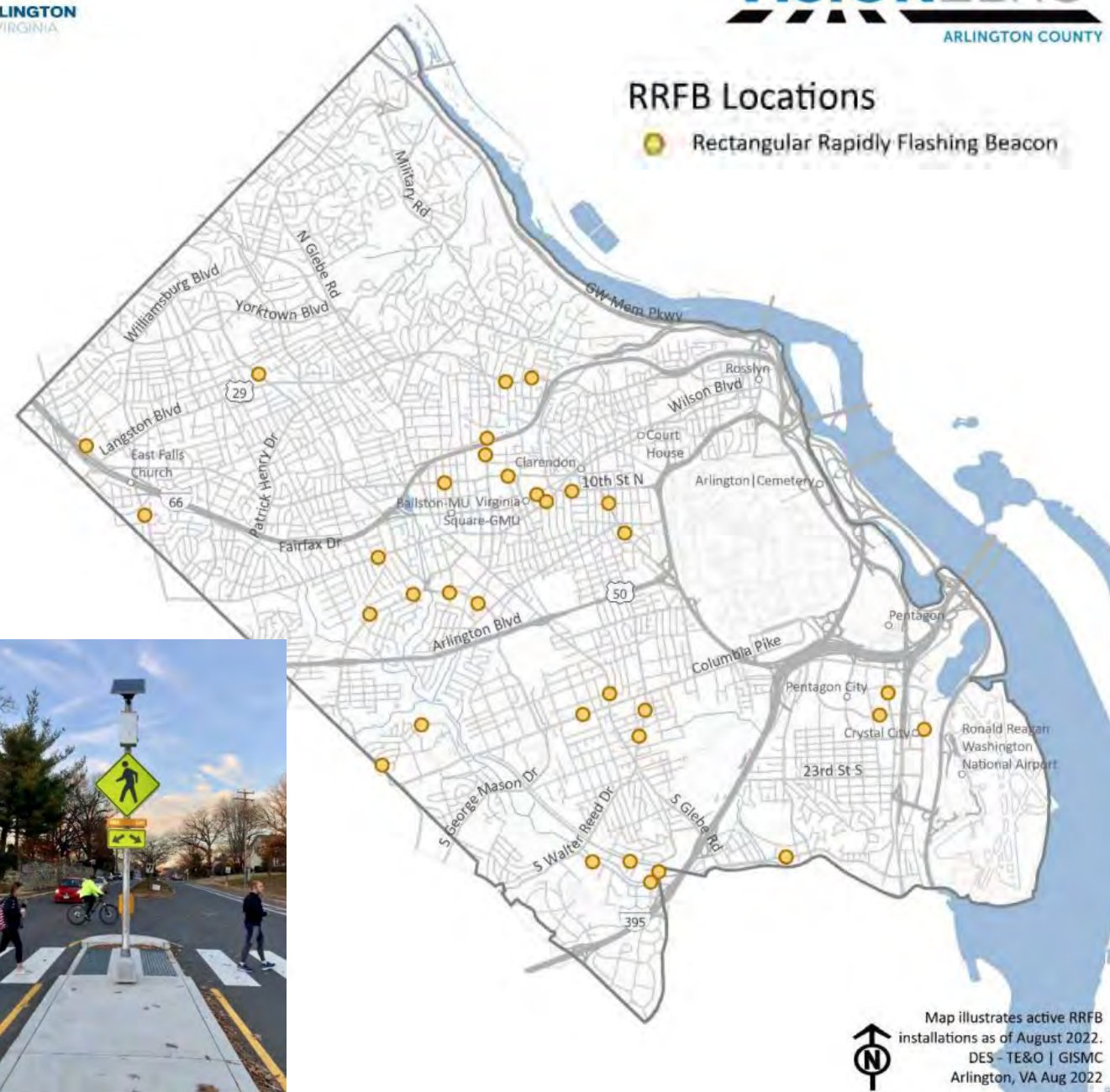
Leading Pedestrian Intervals (LPIs)

- LPIs are programmed into traffic signals to give pedestrians a 3-7 second head start.
- By providing pedestrians with a head start, the risk of conflicts between pedestrians and turning vehicles is reduced.
- LPIs are accompanied by a No Turn on Red sign to prevent right turn conflicts.
- Vision Zero more than tripled the number of LPIs/No Turn on Red Locations in the County (52 in 1.5 years)



Rectangular Reflective Flashing Beacons (RRFBs)

- RRFBs are high-intensity yellow lights, mounted below a pedestrian warning sign, adjacent to a crosswalk.
- RRFBs are activated when a pedestrian pushes an accessible button to turn on the yellow flashing lights. The lights indicate to drivers that they must yield to the crossing pedestrian.
- Before/After studies in Arlington showed that vehicle speeds were reduced by 10 mph and driver probability to yield to crossing pedestrians increased by 35%.
- 30+ Locations in the County





Speed Reduction

- Since Vision Zero, Arlington reduced speed limits on 14 corridors and is studying reductions on 15+ more corridors
- We created demonstration school slow zones in 2022 at 13 schools and will expand the program to 12 more schools in 2023. These school slow zones are 20mph at all times.
- We are adding other elements like Speed Feedback Indicator Signs, roadway reconfigurations, and curb modifications to reduce speeds.



Map illustrates initiatives implemented or initiated between Jan 2021 – Mar 2022.
DES - TE&O | GISMC
Arlington, VA May 2022

Intentional Engagement

- Focus groups to understand safety issues
 - Older Adults
 - People with Disabilities
- Ensuring accessible materials and feedback opportunities
- Hosting pop-up events



Community Activities

- Vision Zero Critical Crash Mitigation Campaign
- BikeArlington & WalkArlington events and classes
 - Adult bike classes
 - Coordinated bike and walk activities
- ACPD education

10
SAFE RIDING TIPS

- 1 SIGNALS, SIGNS, MARKINGS**
Obey all traffic laws, including traffic signals, signs and lane markings.
- 2 RIDE RIGHT, PASS LEFT**
Ride on the right side of the road with the flow of traffic. Pass slower or stopped vehicles on their left.
- 3 CURB RULE**
Ride far enough away from the curb to avoid car doors, potholes, debris and sewer grates.
- 4 BE ALERT**
Scan the road ahead for traffic, pedestrians and obstacles on the road surface.
- 5 RIDE PREDICTABLY**
Make sure others can see you and predict your movements. Use hand signals to indicate turns.
- 6 EYE CONTACT**
Make eye contact with motorists and pedestrians before crossing paths.
- 7 TWO HANDS**
Except when signaling, keep both hands on the handlebars and be ready to brake.
- 8 VISIBILITY**
Use caution with icy/wet road conditions. Be visible by using lights and wearing reflective gear.
- 9 AVOID SIDEWALKS**
Especially in areas where motorists may not expect bicyclists or may have limited visibility.
- 10 TUNE UPS**
Keep your bike in good condition and only ride a bike that is sized and adjusted to fit you.

Bike Arlington



Arlington is one of America's *most walkable communities.*

**EXPECT PEOPLE
STOP FOR PEDESTRIANS**

Did you know?

1 in 3 severe or fatal crashes in Arlington involves a pedestrian.


Predictable | Alert | Lawful

Photo: Sam Kittner/Kittner.com

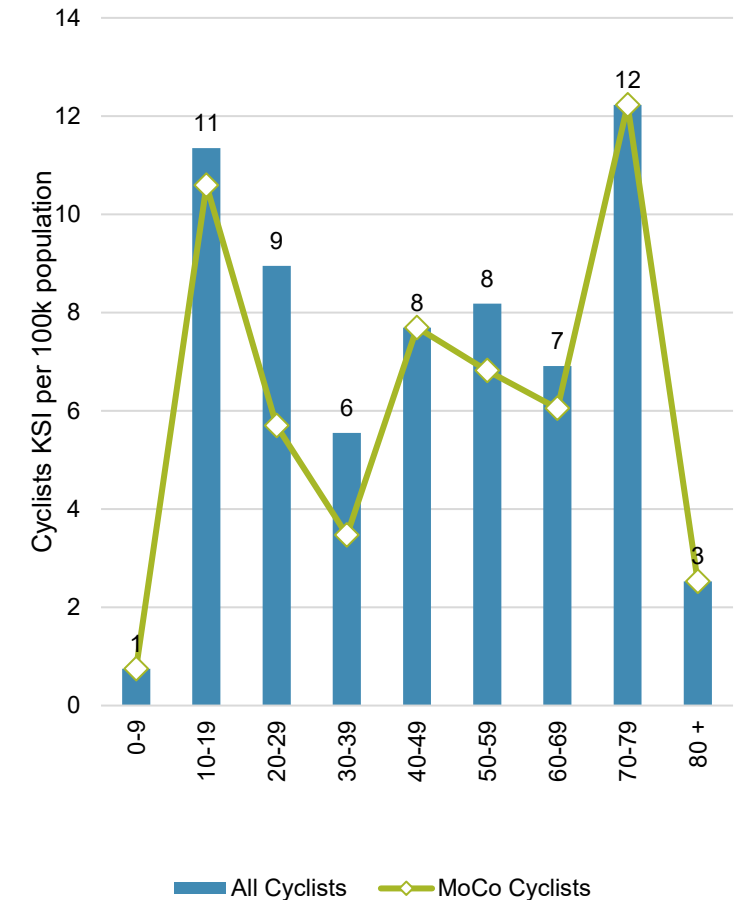
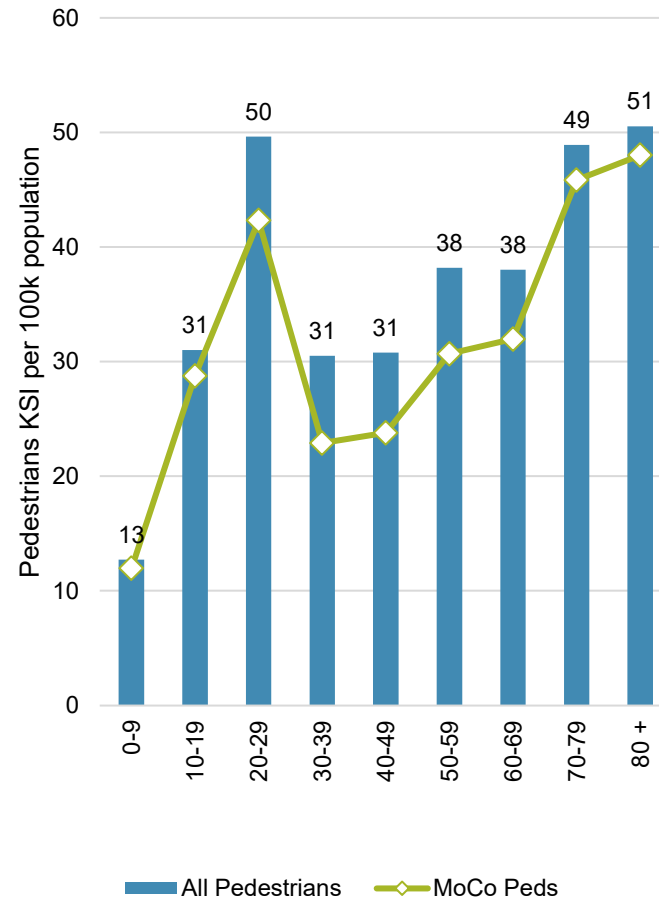
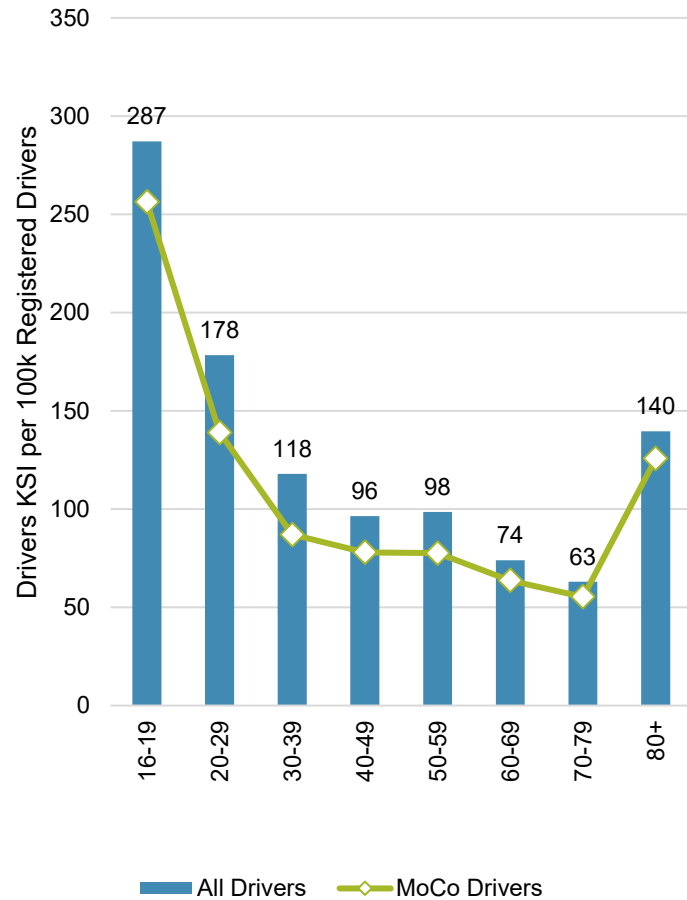
ARLINGTON VIRGINIA



VISION ZERO IN MONTGOMERY COUNTY

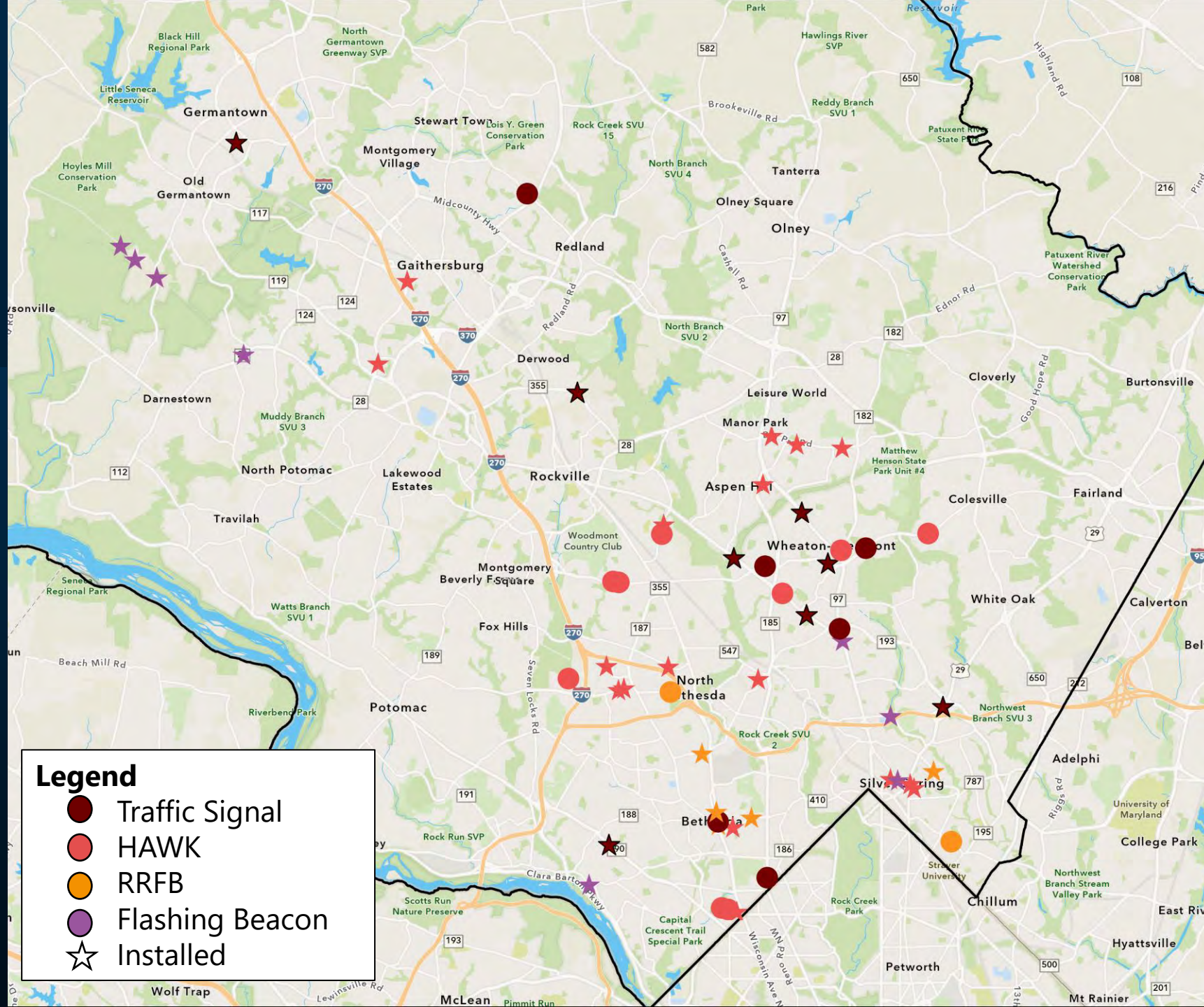
Age and Serious/Fatal Injury

Youngest and oldest Montgomery County residents at most risk for serious and fatal injuries.



Over 30 new installations since Vision Zero started

NEW SIGNAL AND BEACON INSTALLATIONS





Outreach for Ped Hybrid Beacons

PHBs for People Walking

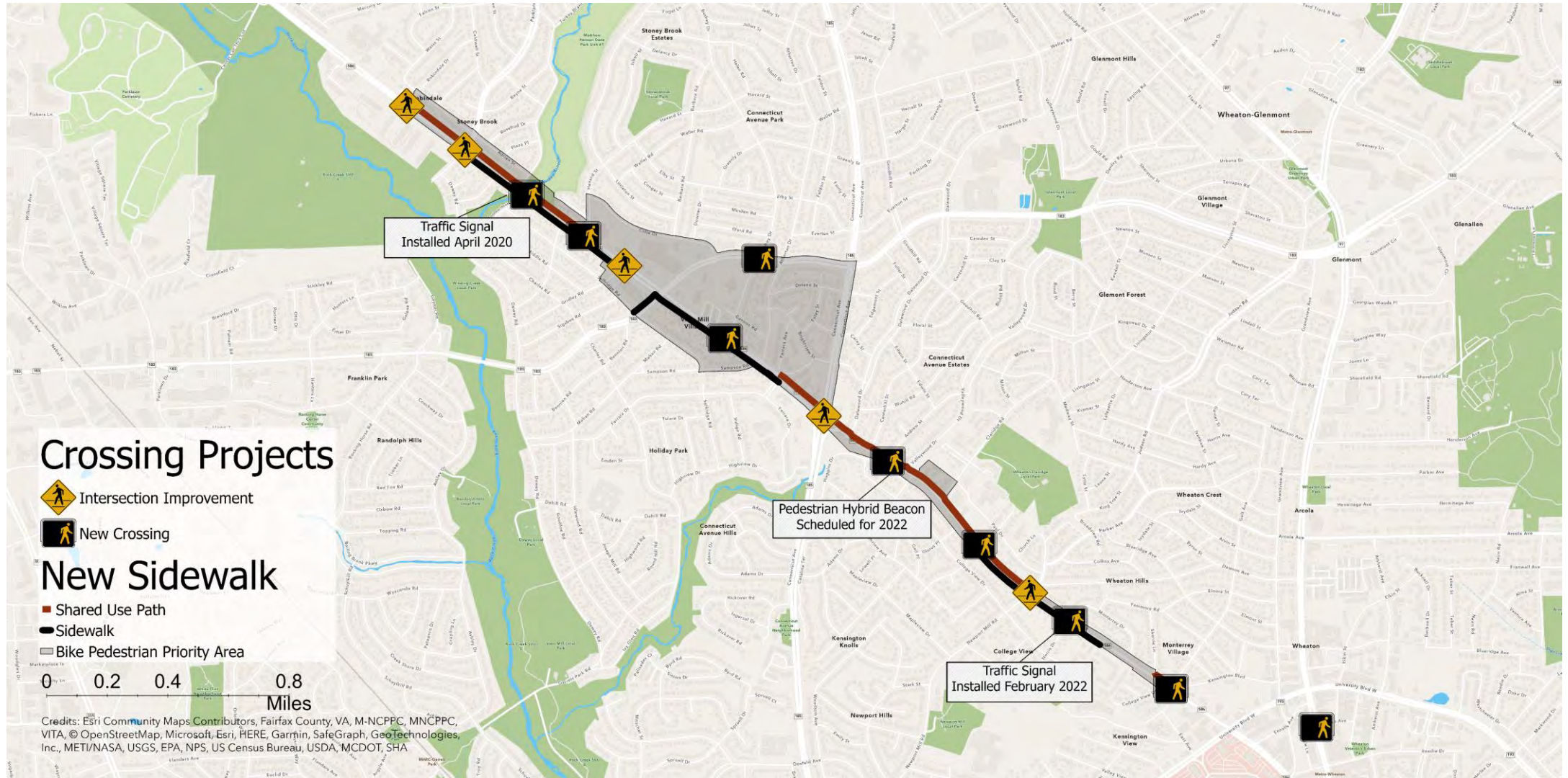
- PHB's function similarly for pedestrians and motor vehicles as a traffic signal functions.
- Pedestrians must activate the signal by pressing the button, then waiting for the walk signal (less than 30 seconds).
- All PHBs have accessible pedestrian signals (APS) and countdown pedestrian signals (CPS).

PHBs for People Driving

- Same rules of the road – yellow means “Exercise Caution” and “Prepare to Stop” and red means “Stop”.
- Nuance is the beacon goes dark, which allows drivers to proceed at speed.
- Continued media and on-street outreach is progressing to build awareness of these new devices.

Veirs Mill Road Safety Projects

Implementing in conjunction with Bus Rapid Transit Project



Safety for People with Disabilities

Planning and Designing Streets to be Safer and More Accessible for People with Vision Disabilities

A Toolkit for Montgomery County and the Metropolitan
Washington Region

*First Edition
October 2021*

Contract No. 21-024

Submitted by Toole Design



Holiday Alcohol Task Force

Promoting Safe Rides Home

- Over 260 DUI arrests for seven-week task force.
- 461 people utilized [SoberRide](#) in DC area.
- [Outreach to bars and restaurants](#) with free coasters with safety message.
- Launched new [Safe Ride Home page](#) to provide one stop shop for finding sober ride options in Montgomery County.



Older Adult Resources

Resources available from Transportation, Recreation, and Health and Human Services

The County Government along with regional and state partners provide multiple alternatives to driving as well as ways to stay safe on the roads.

The full service directory is available on the [County DHHS website](#).



Seniors 65+ Ride Free (Ride-On Bus)



Curb-to-curb and fixed route options to senior centers and Active Adult Program locations



Call 'N Ride (subsidized taxicab service for low-income residents aged 67+)



Driver training and rehabilitation programs



ADVANCING VISION ZERO REGIONALLY

Safer Together

Cross Jurisdiction Collaboration

We promote safety on a regional scale through:

- Cross-Jurisdiction Projects / Services
- Regional Meetings & Information Sharing
- Joint Grant Projects

MWCOG's bimonthly Transportation Safety Subcommittee meeting provides an opportunity to share safety projects and programs regularly.



Safer Together

Regional Consistency

We promote safety on a regional scale when we all use the same:

- Safety Tools / Design
- Rules & Regulations (including ticket reciprocity)
- Community Messaging

When our community members can easily understand street designs, rules, and consequences, we're getting closer to Vision Zero.





Thank you!

Any questions?